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(54) **ADJUSTING GRAPHICS RENDERING BASED ON FACIAL EXPRESSION**

(57) An embodiment of a graphics apparatus may include a facial expression detector to detect a facial expression of a user, and a parameter adjuster communicatively coupled to the facial expression detector to adjust a graphics parameter based on the detected facial expression of the user. The detected facial expression may include one or more of a squinting, blinking, winking,

and facial muscle tension of the user. The graphics parameter may include one or more of a frame resolution, a screen contrast, a screen brightness, and a shading rate. Other embodiments are disclosed and claimed.

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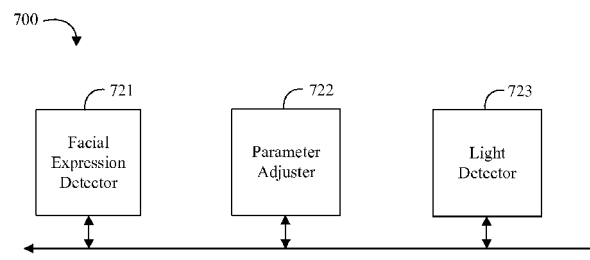


FIG. 7



EUROPEAN SEARCH REPORT

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	* figures 1A-7 * * paragraph [0026] - paragraph [0030] * * paragraph [0041] - paragraph [0071] *	3,8,13	
X	US 2007/159470 A1 (JENG SHIE-CHANG [TW] ET AL) 12 July 2007 (2007-07-12) * figures 1-4C * * paragraph [0007] - paragraph [0011] * * paragraph [0019] - paragraph [0026] *	1,2,6,7,11,12	
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X	US 2016/091877 A1 (FULLAM SCOTT [US] ET AL) 31 March 2016 (2016-03-31) * figures 1-13 * * paragraph [0013] - paragraph [0042] * * paragraph [0065] - paragraph [0068] *	1,2,6,7,11,12	TECHNICAL FIELDS SEARCHED (IPC) G06F G06K G09G
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A	WO 2007/138394 A1 (SONY ERICSSON MOBILE COMM AB [SE]; WEZOWSKI MARTIN MARCIN ROBERT [SE];) 6 December 2007 (2007-12-06) * figures 1-9 * * page 5, line 1 - page 10, line 20 *	1-4,6-9,11-14	
<div>1</div> <div>The present search report has been drawn up for all claims</div>			
Place of search		Date of completion of the search	Examiner
Munich		31 July 2018	Roth, Lucia
<div>CATEGORY OF CITED DOCUMENTS</div> <div> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document </div> <div> T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document </div>			

EPO FORM 1503 03.82 (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-4, 6-9, 11-14

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-4, 6-9, 11-14

Adjusting a graphics parameter in response to a detected facial expression of a user, where the graphics parameter is adjusted in an area of focus.

2. claims: 5, 10, 15

Detecting an amount of squinting of a user based on a detected distance between the user's eyelids.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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